



TOP 10 BIOMECHANICS SOLUTION PROVIDERS - 2019

The advancement of biomechanics is leading the medical industry through the next stage of orthopedics evolution. It has revolutionized the understanding of body mechanics, ranging from limb movement to the mechanical properties of tissues and bones. The integration of engineering techniques with biological sciences has paved the way for modeling robust body implants.

The incorporation of biomechanics in the orthopedics sector has empowered the design and development of effective biomaterials. Today, several companies in the biomechanics sector have taken up the beacon to keep the discipline moving forward and strengthen its impact on future generations.

Inspired by the innovative technological trends revolutionizing the medical industry, MedTech Outlook has compiled a list of 'Top 10 Biomechanics Solution Providers' to showcase the leading developments in the sector. In this edition, we have featured BioPoly, a provider committed to its goal of assisting patients through robust implant solutions designed for the treatment of severe cartilage defects. Another feature, Sensor Medica, specializes in the study, design, and development of high-tech products and software aimed at research, medical, and sports markets. PT Genie is featured for its contributions to the orthopedics sector, including injury-specific rehabilitation protocols to enhance patient outcomes. This edition also includes ERMI, a biomechanics company on its mission to help severe motion loss patients and improve their lives.

Equipped with powerful and proven technological capabilities, the solution providers are set to bring revolutionary transformation into the industry. The purpose of this MedTech Outlook edition is to assist you in building productive partnerships and enhancing your capabilities in restoring the normal functions of your patients. We hope it will spur innovation and growth in your organizations.

We present to you MedTech Outlook's, "Top 10 Biomechanics Solution Providers - 2019."

COMPANY:

Sensor Medica

WEBSITE:

sensormedicausa.com

KEY PERSON:

Kendon Howard
 CEO

DESCRIPTION:

The company designs and develops state-of-the-art products and software that optimize the human biomechanical balance

Sensor Medica

Improving Patient Outcomes with Data-Driven Excellence

Given the importance of precision and efficiency for healthcare professionals, gathering insights from massive data through baropodometric systems have become a necessity for effective treatment. As an early-stage intervention helps prevent severe problems associated with feet, knee, hip, and spine, today's market has a plethora of diagnosis systems for doctors and clinics. Sensor Medica stands out as one of the renowned names in the industry known for designing and developing state-of-the-art solutions that optimize human biomechanical balance. Since its inception in 2011, the company has been involved with biomechanics and orthotics universities, experts, and researchers in ascertaining the right information required by provider to diagnose the patient with foot problems. "As our slogan says, we are technology in motion. We study, design, and develop innovative products and software for the medical and sports fields for the effective optimization of human biomechanical balance," asserts Kendon Howard, CEO, Sensor Medica North America.

The company provides innovative solutions for foot functioning analysis alongside a comprehensive system that envelops diagnostics, rehabilitation, and treatment options, including custom foot orthotics, which are driven by dynamic data. Sensor Medica offers a complete suite of devices ranging from the sensorized treadmill to pressure plate, walkways, and in-shoe systems, all with the possibility of synchronization with video analysis, 3d motion, and EMG.

Unlike other players in the biomechanics arena, Sensor Medica



Kendon Howard

offers the required information to medical care providers for the effective treatment of patients. "The benefits of having objective data for making good diagnostics decisions alongside the growing need for documentation of these decisions have been fueling the modern medical landscape. What we provide is not just the data for research but the data for treatment to improve patient lives and outcomes," states Howard. The primary focus of Sensor Medica's value chain is on providing seamless access to the right information by offering clients the necessary software, CAD-CAM, and CNC machine to build their orthotics products. Although, given the fact that many organizations' diagnosis environments are entangled between different software for various devices used to test different aspects, it makes extraction of relevant data for diagnosis very difficult.

Sensor Medica empowers the diagnostic atmosphere with its flagship software—freeStep—that seamlessly creates an all-inclusive environment for various biomechanics medical devices used in clients' healthcare facilities. It

can perform biomechanical evaluations like static and dynamic plantar pressure, motion analysis, electromyography (EMG), morphological video analysis, digital imaging, posturographic studies with auto-generated reports. "freeStep eliminates the need for numerous specialized software to extract the result of gait, static, and posture analysis. It is an advanced software for the study of plantar pressure, biomechanics, and humans-space relationship," says Howard.

The company's ability to incorporate data from actual dynamic pressure and gait analysis into treatment and orthotic design and fabrication make it a "durable differentiator" in the market. Having carved a unique niche for itself in the market, Sensor Medica's mission is to develop new systems for changing the professional experience in evaluating and treating human posture and biomechanics. Going forward, Sensor Medica plans to release the next generation of freeStep, integrating additional components for motion analysis in tandem with pressure and gait analysis. For customers that desire to perform gait analysis and motion analysis in their clinics, the company aims to integrate a non-radiating 3D spine scanner, and electromyography (EMG) into its solutions. Besides this, Sensor Medica also envisions adding more innovative features with additional soft tissue treatment options. "We integrate diagnostics with solutions. We are continually designing new solutions to integrate with our current offerings that add value to our customers, while continually improving pressure data and video synchronization and refining sensor frequency," concludes Howard. 